#### Rebate Info

#### **Now at Area Stores**



Tucson Water makes it easier and quicker to take advantage of rebates and save water and money with displays at 16 locations including

- Benjamin Supply
- Ferguson Bath, Kitchen & Lighting Gallery
- The Home Depot
- · Lowe's

- Pacific Sales
- San Plumbing Supply
- Originate
   Natural
   Building
   Materials
   Showroom

Look for rebate brochures and applications about installing high efficiency toilets, high efficiency urinals, gray water systems, and rainwater harvesting systems. With in-store products bearing the WaterSense label, you may be able to one-stop shop!

Prefer to access rebate information online? Then go to **tucsonaz.gov/water/rebate** or watch videos on **YouTube.com/TucsonWater**.

If you would like a Tucson Water rebate display at your plumbing or home improvement business, contact the Public Information and Conservation Office at PICO@tucsonaz.gov.

#### Register Now properties

The popular – and free – SmartScape Residential Workshops are underway. Topics include Healthy Landscapes, Hands-on Drip Irrigation, Rainwater Harvesting Incentives, and the Gray Water Rebate Program.

Seating is limited and registration is required. For more information, call the Pima County SmartScape Program at (520) 626-5161. A class schedule is also available at **tucsonaz.gov/water/watersmartclasses**.

# Creating a World Class Pipeline Protection Program

In 1999, a segment of one of Tucson Water's largest pipelines failed, causing extensive water loss and months of repair. This failure – at the heart of our transmission and delivery system – created an opportunity for Tucson Water staff to develop

an innovative assessment effort called the Pipeline Protection Program.

Today, Tucson Water's Pipeline Protection Program is recognized as one of the most advanced and successful working programs in the



Over ten years Tucson Water invested approximatel \$5 million in key technology and capital to create a Pipeline Protection Program that will diagnose, prevent and even predict large water line failure.

world to prevent pipeline failure. Large diameter pipeline users in Arizona, Texas, Colorado, California, Canada, the Sahara Desert and beyond have contacted Tucson Water about our program.

The program ensures water reliability by preventing major breaks, water loss, and service disruptions. It allows staff to quickly and easily detect and repair large pipeline, which means that we keep pipe in top working condition for 50 plus years.

In this issue, you'll learn more about Tucson Water's Pipeline Protection Program, Britt Klein and the onthe-ground Maintenance Division team that help to make it such a success day in and day out.

Alan Forrest, Director, Tucson Water



#### PIMA COUNTY

## PCRWRD's Commitment to Sustainability —

### **Managing Effluent**

The Pima County Regional Wastewater Reclamation Department (PCRWRD) is committed to providing a sustainable environment for the residents of Pima County.

Our vision is to be an industry leader in the management and sustainability of the water reclamation cycle and other renewable resources.

Effluent, also called reclaimed water, is cleaned wastewater and is the product of the wastewater treatment process. Effective management of effluent, a renewable water resource, is crucial in promoting a sustainable environment in Pima County. Through the Regional Optimization Master Plan (ROMP), PCRWRD is reducing the levels of nitrogen, ammonia and phosphorous nutrients in effluent discharges from our two largest and oldest facilities. The ROMP is a multi-faceted construction project that is being implemented to meet new environmental standards for those discharges. The stateof-the-art technology that is being constructed through the ROMP is producing a much higher-quality effluent.

Our Effluent Management Plan includes using reclaimed water to replenish groundwater supplies, irrigate

landscape in area parks, and create riparian habitats in our community. A riparian habitat consists of plants and wildlife found along the banks of a body of water.

The reclaimed water PCRWRD produces is a renewable resource that will provide a water source and sustain the environment for Pima County residents now and into the future.

If you are interested in learning more about effluent and its community benefits, please visit http://www.

pima.gov/wwm/education/Brochures/Effluent Reclaimed Water Fact Sheet 07032013.pdf.



Reclaimed water sustains man-made riparian areas which benefit local wildlife and plants.

CITY OF TUCSON

## Five Easy Ways to Connect

## with Environmental Services (ES)

Today it seems that we have access to multiple sources of information in a wide variety of ways - smartphone, websites, email and more. At ES, we know that you usually contact us with questions about services and schedules, or requests for assistance like replacing a trash or recycling container. To help you communicate with ES more easily, there are multiple ways to connect, to comment or to find out information:



Customer Service is available via phone from 7 a.m. to 5 p.m. Monday through Friday, except during holiday weeks when we'll be available on Saturday.



The ES website is full of tools and information: use our lookup tool at http://maps.tucsonaz.gov/ zoomtucson to find out your collection schedule, zero in on your brush and bulky collection dates, and submit on-line requests.

tucsonaz.gov/esd

EMAIL ESHelp@ tucsonaz.gov

E-mail us with questions or requests and sign-up to receive e-mail notifications. We'll let you know about schedule changes, new programs and services or special collection events.



www.my-waste. mobi/AZ-Tucson/

Go mobile and download the free 'My-Waste'™ app. Schedule reminders for trash and recycling collection, brush and bulky, and Household Hazardous Waste (HHW) collection events. You can report problems by snapping a picture and

clicking send. You'll also have access to a recyclables list and items accepted at HHW collection events.



Tucson

If you are interested in learning more about recycling and diverted waste, like us on Facebook at Do More Blue Tucson.

Do More Blue Regardless of how you choose to connect with us, ES wants to ensure that you receive high quality service in the most convenient way possible!

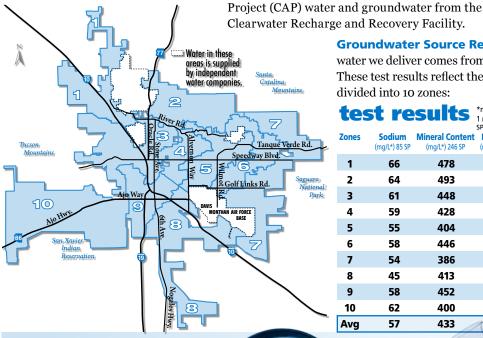
Your utilities services statement includes fees for your water, wastewater, and environmental services.

The Pima County Regional Wastewater Reclamation Department (PCRWRD) - For more information about the regional wastewater system, call (520) 724-6500 or visit pima.gov/wwm.

Environmental Services (ES) - Learn about how ES is protecting our groundwater and the environment at tucsonaz.gov/esd and (520) 791-3171.

# June 2013

More than 20,000 individual water quality tests are performed annually on the drinking water derived from two sources: 1) groundwater and 2) the blend of recharged Central Arizona



**Groundwater Source Report** - About 95% of the water we deliver comes from renewable water supplies. These test results reflect the main distribution system, divided into 10 zones:

Mineral Content Hardness

#### test results

\*mg/L means milligrams per liter 1 mg/L = 1 teaspoon in 1,302 gallons SP = Sample Points

pH Level

Temperature

Lones	(mg/L*) 85 SP	(mg/L*) 246 SP	(mg/L*) 85 SP	(S.U.) 233 SP	(deg°F) 233 SP
1	66	478	219	7.7	85
2	64	493	235	7.9	87
3	61	448	207	7.9	87
4	59	428	217	7.9	88
5	55	404	201	7.8	86
6	58	446	211	7.8	86
7	54	386	203	7.8	87
8	45	413	215	7.6	88
9	58	452	236	7.7	86
10	62	400	217	7.9	86
Avg	57	433	215	7.8	87

The U.S. Environmental **Protection Agency** (EPA) has primary standards for levels of coliform bacteria and the disinfectant chlorine.

EPA standards for positive samples

**Positive results** 246 samples

chlorine

**Actual Average** 246 samples 0.8 mg/L **EPA Standard** Max. 4.0 mg/L **Tucson Water** 

target average 0.8 to 1.2 mg/L

Clearwater Report - More than 50% of our total water supply is a blend of recharged CAP water and native groundwater from Clearwater. Using this recovered blended water means that we reduce groundwater pumping.

0%

Sodium (June 24, 2013) 64 mg/L **Mineral Content** (June 18 - July 11, 2013 avg.) 479.7 mg/L **Hardness** (June 24, 2013) 230 mg/L (June 18 - July 11, 2013 avg.) Нα 8.19 S.U. **Coliform Bacteria Negative** (June 20, 2013) **Chlorine Level** 0.98 mg/L (June 18 - July 11, 2013 avg.) **Temperature** 83.07 °F (June 18 - July 11, 2013 avg.) To obtain water quality information, go to tucsonaz.gov/water and click on the Water Quality tab for maps, reports, and more. Call (520) 791-4331 to schedule speakers, ask for an Annual Water Quality Report, or to request brochures.

## **Smart Pipeline Technology That Prevents and Predicts Breaks**

**Ouality Control Manager Britt** Klein, along with a team of 20 to 30 Maintenance Division professionals, uses cutting edge technology to monitor the health of and to predict catastrophic failures of large diameter water pipelines. Spend five minutes with the enthusiastic and knowledgeable Klein, and you'll quickly learn interesting information about Tucson Water's large pipelines:



Britt Klein has nearly 30 years of expertise in water line technology and holds a Bachelor's degree in Management.

Tucson Water was the first in the world to install Acoustic Fiber Optics (AFO) in all of its PCCP, complemented by a pipeline risk management data system. A continuous wire wrap surrounds the PCCP at a stress up to 189,000 pounds per square inch, giving the pipeline its strength. When a wire breaks, it means the pipe is

Tucson Water is a world leader in 'smart' technology for large diameter pipeline. We have one of the most advanced pipeline condition assessment programs in the world.

Large diameter water pipes are the backbone

of our water system so protecting their health is critical to water reliability. Large diameter pipeline, also known as prestressed concrete cylinder pipe (PCCP), is defined as 48", 54", 66", 78", 84", and 96" diameter. These large pipelines deliver a blend of renewable Colorado River water and groundwater from the Clearwater Facility in Avra Valley.

getting weaker and is closer to failure. The good news - Tucson Water's AFO system inside the pipeline is able to listen, identify and locate breaks and transmit a text alert to four Maintenance team members. Wire break information is also transmitted to the pipeline risk data management system, which determines the remaining useful life of the PCCP segment with the wire break.

The Pipeline Protection Program works! In August 2012, the system detected and prevented a major 96" pipeline failure.

Tucson Water's next project to upgrade pipeline technology will start in January, when water demands are the lowest. Our project team will be replacing the first generation AFO cable inside the 48-inch transmission lines on 3rd Avenue and the 66-inch lines on Greasewood. To be efficient, Tucson Water has coordinated this AFO replacement with Pima County's storm drain work in the area.



Pipeline Protection Program team members inspecting a 54" pipeline located on Columbus Boulevard.

SCAN



**CLICK** 

tucsonaz.gov/

WATCH



user/tucsonwater

**ESPAÑOL** 



(520) 791-4331

CALL



(520) 791-4331

MAIL



**TDD**